

**THE OFFICE OF REGULATORY STAFF**

**DIRECT TESTIMONY AND EXHIBITS**

**OF**

**M. ANTHONY JAMES**



**DOCKET NO. 2006-3-E**

**Duke Power Company LLC d/b/a  
Duke Energy Carolinas, LLC  
Annual Review of Base Rates for Fuel Costs**

**DIRECT TESTIMONY OF****M. ANTHONY JAMES****ON BEHALF OF****THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF****DOCKET NO. 2006-3-E****IN RE: DUKE POWER COMPANY LLC****d/b/a DUKE ENERGY CAROLINAS, LLC****ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS**

**Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.**

**A.** My name is Anthony James. My business address is 1441 Main Street, Suite 300, Columbia, South Carolina 29201. I am employed by the State of South Carolina as a Senior Specialist in the Electric Department for the Office of Regulatory Staff ("ORS").

**Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

**A.** I hold a B.S. Degree in engineering from the University of South Carolina as well as a Master's Degree in environmental resources management. I am a licensed professional engineer registered in the State of South Carolina and a member of the South Carolina Society of Professional Engineers. I am also a member of the Electric Subcommittee of NARUC, and the North Carolina Coal Institute. I have twenty years of experience as a project engineer in the environmental regulatory compliance arena. In December 2004, I joined the Office of Regulatory Staff.

1 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

2 **A.** The purpose of my testimony is to set forth ORS' findings and recommendations  
3 resulting from our examination of Duke Energy Carolinas ("Duke" or "Company") fuel  
4 expenses and power plant operations used in the generation of electricity to meet the  
5 Company's South Carolina retail customer requirements.

6 **Q. WHAT AREAS WERE ENCOMPASSED IN YOUR REVIEW OF THE**  
7 **COMPANY'S FUEL EXPENSES AND PLANT OPERATIONS?**

8 **A.** First, ORS reviewed the Company's responses to ORS' Data Request containing  
9 sixty-nine multi-part questions. In preparation for this proceeding ORS reviewed the  
10 Company's monthly fuel reports including power plant performance data, major unit  
11 outages, and generation statistics. Comparisons and analysis of actual to original  
12 estimates were performed for both megawatt-hour sales and fuel costs.

13 **Q. WHAT ADDITIONAL STEPS WERE TAKEN IN ORS' REVIEW OF THE**  
14 **COMPANY'S PROPOSAL IN THIS PROCEEDING?**

15 **A.** ORS met with various Duke personnel representing a variety of areas of expertise  
16 to discuss and review Duke's fossil and nuclear fuel procurement, fuel transportation,  
17 nuclear, fossil and hydro generation performance, plant dispatch, forecasting, resource  
18 planning, and general Company policies and procedures. These meetings occurred at  
19 ORS as well as Duke Headquarters in Charlotte, N.C. ORS visited the Lee Steam Station  
20 in Anderson County, S.C. to physically observe the electricity generation process at a  
21 fossil fuel power plant. Also, ORS visited Duke's bulk power marketing operations and  
22 Duke's unit dispatching operations in Charlotte, N.C.

1           Also, on a daily basis, ORS keeps abreast of the coal industry including  
2           transportation through industry publications regarding activities in the coal and related  
3           markets.

4   **Q.   DID ORS EXAMINE THE COMPANY'S PLANT PERFORMANCE FOR THE**  
5   **REVIEW PERIOD?**

6   **A.**           Yes. ORS reviewed the Company's performance of its generating facilities to  
7           determine if the Company made reasonable efforts to minimize fuel costs. ORS gave  
8           special attention to the nuclear plant performance. The review period includes the  
9           historical period from July 2005 through June 2006, and the projected period from July  
10          2006 through September 2007. As shown by Exhibit MAJ-1, ORS reviewed the  
11          availability of the Company's major power plants. Page 1 of Exhibit MAJ-1 shows the  
12          monthly availability of the Company's major generating units stated in percentages. The  
13          capacity factors on page 2 of Exhibit MAJ-1 indicate the monthly utilization of each unit  
14          in producing power.

15 **Q.   PLEASE EXPLAIN THE SIGNIFICANCE OF PLANT AVAILABILITY AND**  
16 **HOW IT IS USED IN YOUR EVALUATION OF THE COMPANY'S PLANT**  
17 **PERFORMANCE.**

18 **A.**           Exhibit MAJ-2 shows the Company's major Fossil and Nuclear Units summary of  
19          outages for the review period. With reference to Exhibit MAJ-1, in months where  
20          Generation Units show zero availability as well as those months showing less than 100%  
21          availability led us to investigate the reasons for such occurrences. Exhibit MAJ-1 and  
22          Exhibit MAJ-2 can be used in concert to help evaluate the Company's plant operations.  
23          As an example, page 1 of Exhibit MAJ-1 shows the Oconee Nuclear Unit 3 had 0.00%

1 availability in May 2006. Page 3 of Exhibit MAJ-2 indicates the reason for the 0.00%  
2 availability was the scheduled refueling outage between April 29, 2006 and June 2, 2006,  
3 and therefore, the unit was not available to generate electricity during this time frame.

4 **Q. WOULD YOU EXPLAIN HOW THE OTHER OUTAGES ARE REPRESENTED**  
5 **ON EXHIBIT MAJ-2?**

6 **A.** Yes. Exhibit MAJ-2 provides explanations for major fossil unit outages in excess  
7 of 100 hours, as well as all nuclear plant outages during the review period.

8 **Q. PLEASE ADDRESS THE OUTAGES AT THE COMPANY'S THREE NUCLEAR**  
9 **STATIONS.**

10 **A.** Page 3 of Exhibit MAJ-2 shows the duration of the outages at the Company's  
11 three nuclear stations by unit along with the explanation of the outage. ORS found that  
12 the Company took appropriate corrective action with respect to these outages. The seven  
13 nuclear units combined achieved an overall 93.7% capacity factor for the review period  
14 which includes scheduled refueling and/or scheduled maintenance outages for all of the  
15 units. During this review period, the Catawba Nuclear Station Units 1 and 2 experienced  
16 simultaneous forced outages.

17 **Q. DID ORS EVALUATE THE FORCED OUTAGES EXPERIENCED BY THE**  
18 **CATAWBA UNITS?**

19 **A.** Yes. ORS found that the Catawba Unit 1 as well as Catawba Unit 2 both  
20 experienced a concurrent forced outage on May 20, 2006. Catawba Unit 2 returned to  
21 full operation, after being off-line for 156.03 hours, on May 27, 2006. However,  
22 Catawba Unit 1 experience substantial delays during this forced outage and did not return  
23 to full service until June 10, 2006. Catawba Unit 1 was off-line for 512.64 hours.

1           This outage prompted an investigation by the Nuclear Regulatory Commission  
2           ("NRC"). On May 31, 2006, ORS attended the NRC Augmented Inspection Team Exit  
3           Meeting which outlined the preliminary findings of the inspection team. ORS also met  
4           with representatives from Duke's nuclear operations to discuss all nuclear outages with  
5           specific attention to the Catawba Station forced outage. The outage was primarily caused  
6           by a switchyard transformer fault in conjunction with improperly set relays which led to  
7           the loss of off-site alternate power to both units. According to NRC findings, the two  
8           Units shut-down as designed and the four emergency diesel generators responded  
9           appropriately by supplying power to designated vital equipment in accordance with  
10          emergency operating procedures.

11          On June 29, 2006, the NRC issued its inspection report that outlined the following  
12          four Unresolved Items ("URIs") associated with this forced outage: (1) Incorrect setting  
13          of relays; (2) Untimely notification to the NRC of the event; (3) Failure of seal conduits  
14          into manholes and the 1A diesel generator room; and, (4) Degraded seals found on  
15          below-grade electrical conduits entering areas containing safety related equipment. As  
16          they become available, Duke should provide to ORS any and all subsequent reports or  
17          other materials generated by NRC or Duke as related to the above URIs.

18          To date, there have been no NRC fines associated with this forced outage or any  
19          other nuclear outage during the review period.  
20  
21  
22

1 **Q. WHAT WERE THE RESULTS OF YOUR ANALYSIS OF THE COMPANY'S**  
2 **PLANT OPERATIONS FOR THE PERIOD UNDER REVIEW?**

3 **A.** ORS' review of the Company's operation of its generating facilities concluded  
4 that the Company made reasonable efforts to maximize unit availability and minimize  
5 fuel costs.

6 **Q. DID ORS REVIEW THE GENERATION MIX AND BASE UNIT FUEL COSTS**  
7 **UTILIZED BY THE COMPANY DURING THE REVIEW PERIOD?**

8 **A.** Yes. Exhibit MAJ-3 shows the monthly generation mix for the review period by  
9 generation type. The Company has no combined-cycle gas-fired generating units in its  
10 fleet, and uses its simple-cycle combustion turbine units sparingly during peaking periods  
11 or when capacity is short and purchase opportunities are not economical. The  
12 Company's load is mainly met through comparable portions of nuclear and coal  
13 generation along with a small amount of hydro production.

14 In addition, Exhibit MAJ-4 shows the average fuel cost in cents per kilowatt-hour  
15 to operate, and generation in megawatt-hours for the Company's base load nuclear and  
16 coal-fired facilities. The McGuire Nuclear Station had the least expensive average fuel  
17 cost at 0.37 cents per kilowatt-hour. Cliffside 5, a coal-fired unit, had the most expensive  
18 fuel cost at 2.86 cents per kilowatt-hour. The highest total generation of 20,545,079  
19 megawatt-hours, was produced at the Oconee Nuclear Station.

20 **Q. HAS ORS REVIEWED THE ACCURACY OF THE COMPANY'S FORECAST?**

21 **A.** Yes. As shown in Exhibit MAJ-5, the Company's actual megawatt-hour sales  
22 versus forecasted sales varied by only 2.59% during the review period. In addition,  
23 Exhibit MAJ-6 shows the monthly variance between projected and actual fuel cost for the

1 review period. This Exhibit demonstrates that the Company was able to improve its  
2 forecasted costs during seven of the twelve months of the review period.

3 **Q. DID ORS REVIEW ADDITIONAL INFORMATION IN DETERMINING THE**  
4 **REASONABLENESS OF THE COMPANY'S FORECAST?**

5 **A.** Yes. ORS reviewed the forecasted maintenance schedules for the Company's  
6 major generating units as well as the Company's forecasted fuel price for nuclear and  
7 coal. ORS also reviewed the Company's load forecasting and dispatch procedures.  
8 Based on the review, ORS believes Duke's forecast is reasonable and appropriate.

9 **Q. WHAT OTHER INFORMATION HAS ORS REVIEWED IN MAKING ITS**  
10 **DETERMINATIONS IN THIS PROCEEDING?**

11 **A.** Exhibit MAJ-7 shows the ending balances of over and under collections of fuel  
12 costs beginning November 1979. The Company has experienced both over and under  
13 recovery balances throughout the approximate twenty-seven year period.

14 **Q. WHAT OTHER SOURCES OF INFORMATION DOES ORS USE IN**  
15 **DETERMINING THE REASONABLENESS OF A UTILITY'S REQUEST FOR A**  
16 **FUEL COST COMPONENT?**

17 **A.** ORS routinely 1) reviews private and public industry publications as well as those  
18 available on the Energy Information Administration's ("EIA") website; 2) conducts  
19 meetings with Company personnel; 3) conducts meetings with representatives of large  
20 industrial energy consumers; 4) attends industry conferences; and 5) reviews information  
21 as filed monthly by electric generating utilities on Form 423 with the Federal Energy  
22 Regulatory Commission. An example of EIA data reviewed is included on Exhibit MAJ-  
23 8, which provides spot coal price data for a three year period and includes the most recent

1 upward trend of the average weekly coal commodity spot prices for Central Appalachia  
2 beginning in late 2003 then leveling off in the upper \$50 to the mid \$60 per ton range  
3 during the review period. Duke generally obtains its coal from the Central Appalachia  
4 region.

5 **Q. DOES ORS HAVE A RECOMMENDATION FOR THE FUEL COMPONENT IN**  
6 **THIS PROCEEDING?**

7 **A.** Yes. ORS recommends the fuel component in this proceeding be set at 1.7760  
8 cents per kilowatt-hour for the period October 2006 through September 2007 which will  
9 result in an increase of 0.1958 cents per kilowatt-hour from the currently approved  
10 1.5802 cents per kilowatt-hour factor.

11 **Q. PLEASE EXPLAIN THE BASIS FOR YOUR PROPOSED BASE FUEL LEVEL**  
12 **COMPONENT.**

13 **A.** Our analysis indicates the major driver for the upward pressure on fuel costs  
14 continue to be the significant increases in the delivered cost of coal.

15 The ORS Audit Department verified and provided the cumulative recovery  
16 account balance as of June 2006 calculating an over-recovered balance of \$6,984,672 as  
17 reflected on ORS Audit Exhibit JRC-7. This Audit Department balance is also reflected  
18 on Exhibit MAJ-7.

19 **Q. HOW WILL THIS PROPOSED INCREASE IN FUEL LEVEL COMPONENT**  
20 **IMPACT RESIDENTIAL CUSTOMERS?**

21 **A.** In the previous review of Duke's base rates for fuel costs (Docket 2005-3-E),  
22 ORS recommended a separate decrement (or reduction) of 0.1732 cents per kilowatt-hour  
23 be established to flow the revenue requirement related to an excess deferred tax liability

1 to South Carolina customers resulting in a net billing component of 1.4070 (1.5802 less  
2 0.1732) cents per kilowatt-hour. The decrement was designed to coincide with the  
3 Company's approved fuel component for the period October 2005 through September  
4 2006. This recommendation was approved by the Commission, and hence, the decrement  
5 will expire and be eliminated from South Carolina retail rates at the end of the fuel billing  
6 period in September 2006.

7 Under Docket 2005-210-E, ORS entered into an agreement with Duke related to  
8 its merger with Cinergy which required Duke to reduce its South Carolina retail base  
9 rates by \$40 million dollars to be effective during the period of June 1, 2006 through May  
10 31, 2007. A decrement of 0.178 cents per kilowatt-hour was directly applied to the  
11 Company's billing component.

12 The overall cumulative affect of the new/expiring decrements and the proposed  
13 increase results in a 4.94% increase in the average monthly residential consumer's  
14 billing. The average residential customer uses approximately 1,000 kilowatt-hours per  
15 month and will see an increase of approximately \$3.69 in their monthly bill during the  
16 Company's October 2006 billing cycle in which \$1.96 (or 53% of the increase) reflects  
17 the increase in the Company's fuel cost. Also, residential customers using 1,000  
18 kilowatt-hours per month will see an additional increase of \$1.78 in the Company's June  
19 2007 billing cycle, when the merger decrement expires.

20 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

21 **A.** Yes, it does.

**SOUTH CAROLINA  
OFFICE OF REGULATORY STAFF**

**DUKE ENERGY CAROLINAS  
ANNUAL REVIEW OF BASE RATES FOR FUEL COST  
ACTUAL REVIEW PERIOD: JULY, 2005 – JUNE, 2006**

**DOCKET NO. 2006-3-E**

**M. ANTHONY JAMES TESTIMONY**

**EXHIBIT INDEX**

**EXHIBIT NO.**

**EXHIBIT TYPE**

|              |  |
|--------------|--|
| <b>MAJ-1</b> | <b>Power Plant Performance Data Report – Availability/Capacity Factors for Duke Energy Carolinas</b> |
| <b>MAJ-2</b> | <b>Fossil/Nuclear Unit Outage Report (100 Hrs. or Greater Duration) for Duke Energy Carolinas</b>    |
| <b>MAJ-3</b> | <b>Generation Mix Report (July 2005 – June 2006) for Duke Energy Carolinas</b>                       |
| <b>MAJ-4</b> | <b>Generation Statistics for Major Plants (July 2005 – June 2006) for Duke Energy Carolinas</b>      |
| <b>MAJ-5</b> | <b>SC Retail Comparison of Estimated to Actual Energy Sales for Duke Energy Carolinas</b>            |
| <b>MAJ-6</b> | <b>SC Retail Comparison of Estimated to Actual Fuel Cost for Duke Energy Carolinas</b>               |
| <b>MAJ-7</b> | <b>History of Cumulative Recovery Account Report for Duke Energy Carolinas</b>                       |
| <b>MAJ-8</b> | <b>EIA Average Weekly Coal Commodity Spot Prices</b>   |

*All Exhibits Prepared by the SC Office of Regulatory Staff*

**South Carolina  
Office of Regulatory Staff  
Power Plant Performance Data Report  
Availability Factors (Percentage)  
for Duke Energy Carolinas**

| PLANT          | MW<br>RATING | JUL<br>2005 | AUG<br>2005 | SEP<br>2005 | OCT<br>2005 | NOV<br>2005 | DEC<br>2005 | JAN<br>2006 | FEB<br>2006 | MAR<br>2006 | APR<br>2006 | MAY<br>2006 | JUN<br>2006 |
|----------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| CATAWBA - 1    | 1129         | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 63.18       | 66.85       |
| CATAWBA - 2    | 1129         | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 55.51       | 20.02       | 79.03       | 100.00      |
| MCGUIRE - 1    | 1100         | 100.00      | 100.00      | 54.31       | 42.74       | 100.00      | 94.50       | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      |
| MCGUIRE - 2    | 1100         | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      |
| OCONEE - 1     | 846          | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 76.63       |
| OCONEE - 2     | 846          | 100.00      | 100.00      | 100.00      | 67.68       | 1.28        | 100.00      | 100.00      | 100.00      | 100.00      | 83.58       | 100.00      | 100.00      |
| OCONEE - 3     | 846          | 100.00      | 98.72       | 79.43       | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 100.00      | 93.56       | 0.00        | 84.74       |
| NUCLEAR TOT    | 6996         | 100.00      | 99.82       | 90.53       | 87.20       | 85.90       | 99.21       | 100.00      | 100.00      | 93.64       | 85.31       | 77.46       | 89.75       |
| BELEWS CRK - 1 | 1135         | 96.58       | 97.91       | 99.89       | 92.54       | 68.37       | 91.56       | 96.83       | 57.31       | 90.45       | 80.61       | 99.92       | 81.48       |
| BELEWS CRK - 2 | 1135         | 91.00       | 99.49       | 99.81       | 73.61       | 99.83       | 75.01       | 99.18       | 90.43       | 46.76       | 32.62       | 97.56       | 99.91       |
| CLIFFSIDE - 5  | 562          | 99.80       | 98.53       | 99.84       | 71.99       | 95.67       | 85.33       | 88.22       | 95.87       | 99.57       | 47.12       | 86.31       | 99.90       |
| MARSHALL - 3   | 670          | 92.90       | 98.88       | 98.90       | 59.88       | 61.86       | 86.43       | 98.92       | 97.84       | 99.54       | 69.01       | 98.36       | 65.82       |
| MARSHALL - 4   | 670          | 98.79       | 98.47       | 99.23       | 89.59       | 80.32       | 99.99       | 99.65       | 84.50       | 0.00        | 0.00        | 40.80       | 99.66       |
| FOSSIL TOTALS  | 4172         | 95.26       | 98.67       | 99.60       | 78.90       | 81.48       | 86.75       | 97.10       | 82.39       | 66.73       | 48.23       | 87.70       | 89.38       |

**South Carolina  
Office of Regulatory Staff  
Power Plant Performance Data Report  
Capacity Factors (Percentage)  
for Duke Energy Carolinas**

| PLANT          | HISTORICAL DATA |              |              |              |              | REVIEW PERIOD (ACTUAL) DATA |             |             |             |             |             |             |             |             |             |             |             |
|----------------|-----------------|--------------|--------------|--------------|--------------|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                | MW<br>RATING    | LIFE<br>TIME | YEAR<br>2003 | YEAR<br>2004 | YEAR<br>2005 | JUL<br>2005                 | AUG<br>2005 | SEP<br>2005 | OCT<br>2005 | NOV<br>2005 | DEC<br>2005 | JAN<br>2006 | FEB<br>2006 | MAR<br>2006 | APR<br>2006 | MAY<br>2006 | JUN<br>2006 |
| CATAWBA - 1    | 1129            | 81.62        | 83.00        | 97.90        | 92.79        | 101.32                      | 101.14      | 101.64      | 102.66      | 103.21      | 103.61      | 103.53      | 103.71      | 102.77      | 102.33      | 64.72       | 65.89       |
| CATAWBA - 2    | 1129            | 82.98        | 94.00        | 89.10        | 102.11       | 101.37                      | 101.28      | 101.80      | 102.60      | 102.94      | 102.85      | 103.25      | 103.38      | 55.92       | 13.15       | 77.14       | 101.91      |
| MCGUIRE - 1    | 1100            | 74.64        | 103.00       | 85.30        | 93.07        | 99.08                       | 101.07      | 53.99       | 38.19       | 100.54      | 98.01       | 105.32      | 105.23      | 104.91      | 104.78      | 102.46      | 102.33      |
| MCGUIRE - 2    | 1100            | 81.73        | 94.00        | 103.40       | 88.68        | 102.35                      | 101.43      | 101.45      | 103.06      | 101.61      | 105.39      | 105.66      | 105.80      | 105.58      | 105.21      | 104.01      | 103.22      |
| OCONEE - 1     | 846             | 75.02        | 71.00        | 97.70        | 90.68        | 101.08                      | 100.41      | 99.83       | 99.96       | 100.49      | 101.86      | 102.00      | 102.04      | 101.91      | 101.44      | 101.55      | 75.88       |
| OCONEE - 2     | 846             | 77.17        | 102.00       | 76.30        | 89.92        | 101.95                      | 101.19      | 99.86       | 55.59       | 0.00        | 102.55      | 103.84      | 103.84      | 103.86      | 85.32       | 103.43      | 102.62      |
| OCONEE - 3     | 846             | 76.80        | 85.00        | 77.20        | 97.65        | 102.62                      | 100.61      | 78.16       | 101.73      | 102.00      | 103.39      | 103.54      | 103.55      | 103.56      | 93.29       | 0.00        | 84.37       |
| NUCLEAR TOT    | 6996            | 78.84        | 90.74        | 90.22        | 93.68        | 101.34                      | 101.05      | 90.87       | 86.45       | 89.54       | 102.52      | 103.95      | 104.02      | 96.11       | 85.52       | 80.14       | 91.19       |
| BELEWS CRK - 1 | 1135            | n/a          | n/a          | n/a          | n/a          | 88.71                       | 94.01       | 92.48       | 85.01       | 65.81       | 78.49       | 84.06       | 51.35       | 84.17       | 76.88       | 95.90       | 73.73       |
| BELEWS CRK - 2 | 1135            | n/a          | n/a          | n/a          | n/a          | 84.22                       | 97.17       | 95.68       | 70.23       | 93.83       | 65.33       | 89.99       | 84.31       | 42.02       | 28.76       | 94.45       | 94.54       |
| CLIFFSIDE - 5  | 562             | n/a          | n/a          | n/a          | n/a          | 84.78                       | 97.75       | 85.37       | 41.52       | 67.06       | 49.02       | 27.90       | 60.47       | 74.43       | 37.80       | 73.28       | 85.30       |
| MARSHALL - 3   | 670             | n/a          | n/a          | n/a          | n/a          | 84.43                       | 93.55       | 88.74       | 54.97       | 60.10       | 78.36       | 92.85       | 94.32       | 94.99       | 67.04       | 92.18       | 59.87       |
| MARSHALL - 4   | 670             | n/a          | n/a          | n/a          | n/a          | 90.59                       | 93.12       | 90.96       | 86.45       | 77.71       | 94.23       | 95.64       | 82.56       | 0.00        | 0.00        | 37.99       | 95.62       |
| FOSSIL TOTALS  | 4172            | n/a          | n/a          | n/a          | n/a          | 86.57                       | 95.16       | 91.55       | 70.54       | 74.60       | 73.45       | 81.38       | 73.46       | 59.61       | 44.60       | 82.56       | 82.24       |

*The lifetime nuclear capacity factors are through December 2005*

**South Carolina  
Office of Regulatory Staff  
Major Fossil Unit Outage Report  
(100 Hrs or Greater Duration)  
for Duke Energy Carolinas**

| UNIT             | DATE OFF | DATE ON  | HOURS | TYPE    | EXPLANATION OF OUTAGE  |
|------------------|----------|----------|-------|---------|--|
| Belews Creek - 1 | 11/16/05 | 11/25/05 | 224.5 | Planned | Exciter Replacement Outage. Original exciter was in service, but was at end of service life. Unit was replaced without incident.   |
| Belews Creek - 1 | 02/13/06 | 02/20/06 | 160.3 | Forced  | Tube leak resulted in forced outage. Planned scheduled maintenance was moved forward and accomplished during this time. All plant equipment inspected and repaired as necessary.               |
| Belews Creek - 1 | 06/23/06 | 06/29/06 | 124.9 | Forced  | Tube leak resulted in forced outage. When attempting to bring unit online, additional water chemistry issues were discovered in boiler. The source of the issue was tracked down and repaired. |
| Belews Creek - 2 | 10/14/05 | 10/19/05 | 120.0 | Planned | Maintenance Outage. Preheater required washing due to ammonia bisulfate plugging. Unit was cleaned and inspected without incident.   |
| Belews Creek - 2 | 12/16/05 | 12/20/05 | 117.3 | Forced  | Boiler Tube Leak. Tube leak was in a tube bundle, requiring the spreading of the tubes and working down into the bundle to make repairs.   |
| Belews Creek - 2 | 03/04/06 | 03/10/06 | 135.4 | Forced  | Tube Leak. Leak was repaired and inspected without incident.   |
| Belews Creek - 2 | 03/25/06 | 04/15/06 | 517.5 | Planned | Maintenance Outage. Modifications were made to turbine valves as part of reliability plans. Inspections were performed on equipment and repairs made as necessary.                             |
| Belews Creek - 2 | 04/15/06 | 04/19/06 | 104.6 | Planned | This was an extension of the above outage due to hydrogen leak on the LP generator coolers. One cooler needed to be replaced to stop hydrogen leak.  |

**South Carolina  
Office of Regulatory Staff  
Major Fossil Unit Outage Report  
(100 Hrs or Greater Duration)  
for Duke Energy Carolinas**

| UNIT          | DATE OFF | DATE ON  | HOURS  | TYPE    | EXPLANATION OF OUTAGE   |
|---------------|----------|----------|--------|---------|---|
| Cliffside - 5 | 10/07/05 | 10/13/05 | 136.5  | Planned | Maintenance Outage included an air heater wash and maintenance to pulverizers.  |
| Cliffside - 5 | 04/15/06 | 04/29/06 | 349.6  | Planned | Boiler Inspection including cleaning of condensers.   |
| Marshall - 3  | 10/14/05 | 10/23/05 | 218.7  | Planned | Maintenance Outage. Inspections were performed on equipment and repairs made as necessary.  |
| Marshall - 3  | 04/22/06 | 04/30/06 | 213.5  | Planned | Maintenance Outage. Inspections were performed on equipment and repairs made as necessary.  |
| Marshall - 3  | 06/02/06 | 06/11/06 | 194.3  | Forced  | Tube Leak caused by failure of high pressure weld. Tube failure damaged adjacent tubes. Leak area was difficult to access, making repairs more time consuming. Repairs were made as necessary.                            |
| Marshall - 3  | 06/28/06 | 07/07/06 | 199.9  | Forced  | Tube Leak initiated by failure inside waterwall. Initial leak washed out several other tubes. A total of 31 leaks were repaired. The waterwall panels are scheduled to be replaced during the scheduled fall 2006 outage. |
| Marshall - 4  | 10/29/05 | 11/06/05 | 209.3  | Planned | Maintenance Outage. Inspections were performed on equipment and repairs made as necessary.  |
| Marshall - 4  | 02/24/06 | 05/21/06 | 2052.0 | Planned | This precipitator tie-in outage was a once in a lifetime event to connect the first new precipitator since the unit was built over 35 years ago.  |

**South Carolina  
Office of Regulatory Staff  
Nuclear Unit Outage Report  
for Duke Energy Carolinas**

| UNIT        | DATE OFF   | DATE ON    | HOURS  | TYPE    | EXPLANATION OF OUTAGE  |
|-------------|------------|------------|--------|---------|--|
| Catawba - 1 | 5/20/2006  | 6/10/2006  | 512.64 | Forced  | Loss of off-site power. Replaced transformer. Reset and tested switchyard relays and other system components. Outage extended to clean lower containment system. |
| Catawba - 2 | 3/18/2006  | 4/25/2006  | 906.03 | Planned | Scheduled Refueling Outage. Delayed by problem with fuel assembly and cono seal leak.  |
| Catawba - 2 | 5/20/2006  | 5/27/2006  | 156.03 | Forced  | Loss of off-site power. Replaced transformer. Reset and tested switchyard relays and other system components.  |
| McGuire - 1 | 9/17/2005  | 10/19/2005 | 755.57 | Planned | Scheduled Refueling Outage.  |
| McGuire - 1 | 12/17/2005 | 12/18/2005 | 40.93  | Forced  | Repair and replacement of selected components within feedwater flow system.  |
| Oconee - 1  | 6/14/2006  | 6/21/2006  | 168.25 | Planned | Scheduled maintenance outage to inspect reactor building emergency sump piping.  |
| Oconee - 2  | 10/22/2005 | 11/30/2005 | 951.57 | Planned | Scheduled Refueling Outage. Delayed by repair of several components.   |
| Oconee - 2  | 4/12/2006  | 4/17/2006  | 118.03 | Forced  | Loss of isolation during scheduled testing of a pump power transducer lead to trip of reactor coolant pump.  |
| Oconee - 3  | 8/31/2005  | 9/7/2005   | 157.61 | Forced  | Power loss to Control Rod Drive System. Replaced deficient breakers in Control Rod Drive system.   |
| Oconee - 3  | 4/29/2006  | 6/2/2006   | 840.10 | Planned | Scheduled Refueling Outage. Delayed by feedwater valve.  |
| Oconee - 3  | 6/3/2006   | 6/5/2006   | 60.05  | Forced  | Replacement of 4 KV windings on 3T transformer.  |

**South Carolina**  
**Office of Regulatory Staff**  
**Generation Mix Report (July 2005 – June 2006)**  
**for Duke Energy Carolinas**

| <u>MONTH</u>     | <u>PERCENTAGE</u> |                |              |
|------------------|-------------------|----------------|--------------|
|                  | <u>FOSSIL</u>     | <u>NUCLEAR</u> | <u>HYDRO</u> |
| <b>2005</b>      |                   |                |              |
| <b>July</b>      | 45.8              | 52.7           | 1.5          |
| <b>August</b>    | 47.8              | 51.1           | 1.1          |
| <b>September</b> | 49.1              | 50.9           | 0.0          |
| <b>October</b>   | 44.0              | 55.4           | 0.6          |
| <b>November</b>  | 42.0              | 57.7           | 0.3          |
| <b>December</b>  | 39.9              | 59.0           | 1.1          |
| <b>2006</b>      |                   |                |              |
| <b>January</b>   | 37.1              | 61.3           | 1.6          |
| <b>February</b>  | 41.2              | 57.6           | 1.2          |
| <b>March</b>     | 40.6              | 59.4           | 0.0          |
| <b>April</b>     | 40.8              | 59.2           | 0.0          |
| <b>May</b>       | 48.4              | 51.6           | 0.0          |
| <b>June</b>      | 48.1              | 51.9           | 0.0          |

**South Carolina**  
**Office of Regulatory Staff**  
**Generation Statistics for Major Plants**  
**(July 2005 – June 2006)**  
**for Duke Energy Carolinas**

| PLANT       | TYPE FUEL | AVERAGE FUEL COST<br>(CENTS/KWH*) | GENERATION<br>(MWH) |
|-------------|-----------|-----------------------------------|---------------------|
| Catawba     | Nuclear   | 0.41                              | 18,326,943          |
| Oconee      | Nuclear   | 0.42                              | 20,545,079          |
| McGuire     | Nuclear   | 0.37                              | 18,948,004          |
| Marshall    | Coal      | 2.18                              | 14,337,489          |
| Cliffside 5 | Coal      | 2.86                              | 3,177,586           |
| Belews Crk  | Coal      | 2.06                              | 15,858,674          |

(\*) The average fuel costs for coal-fired plants include oil and/or gas cost for start-up and flame stabilization.

**South Carolina**  
**Office of Regulatory Staff**  
**SC Retail Comparison of Estimated to Actual Energy Sales**  
**for Duke Energy Carolinas**

|   | <b>2005</b>       |                   |                   |                   |                   |                   | <b>2006</b>       |                   |                   |                   |                   |                   |                     |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|
|   | <u><b>JUL</b></u> | <u><b>AUG</b></u> | <u><b>SEP</b></u> | <u><b>OCT</b></u> | <u><b>NOV</b></u> | <u><b>DEC</b></u> | <u><b>JAN</b></u> | <u><b>FEB</b></u> | <u><b>MAR</b></u> | <u><b>APR</b></u> | <u><b>MAY</b></u> | <u><b>JUN</b></u> | <u><b>TOTAL</b></u> |
| <b>[1] ESTIMATED<br/>SALES [MWH]</b>          | 2,090,800         | 2,167,462         | 2,080,211         | 1,736,102         | 1,699,124         | 1,795,523         | 1,892,880         | 1,852,853         | 1,684,387         | 1,717,515         | 1,722,141         | 1,910,966         | <b>22,349,964</b>   |
| <b>[2] ACTUAL<br/>SALES [MWH]</b>             | 1,906,553         | 2,157,117         | 2,088,261         | 1,795,957         | 1,695,074         | 1,764,319         | 1,776,344         | 1,767,429         | 1,606,021         | 1,670,377         | 1,650,703         | 1,906,676         | <b>21,784,831</b>   |
| <b>[3] AMOUNT<br/>DIFFERENCE<br/>[1]-[2]</b>  | 184,247           | 10,345            | -8,050            | -59,855           | 4,050             | 31,204            | 116,536           | 85,424            | 78,366            | 47,138            | 71,438            | 4,290             | <b>565,133</b>      |
| <b>[4] PERCENT<br/>DIFFERENCE<br/>[3]/[2]</b> | 9.66              | 0.48              | -0.39             | -3.33             | 0.24              | 1.77              | 6.56              | 4.83              | 4.88              | 2.82              | 4.33              | 0.23              | <b>2.59</b>         |

**South Carolina**  
**Office of Regulatory Staff**  
**SC Retail Comparison of Estimated to Actual Fuel Cost**  
**for Duke Energy Carolinas**

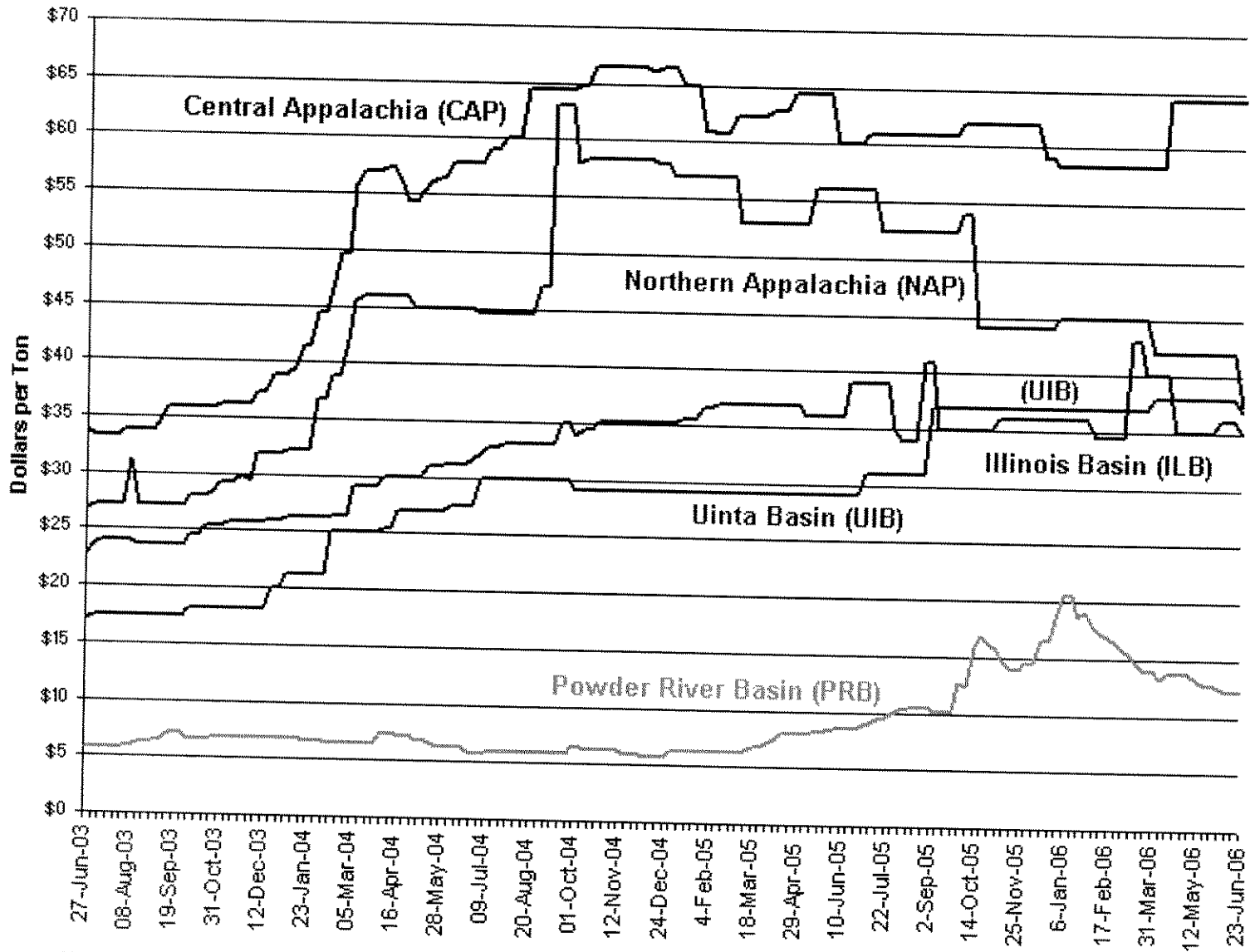
|   | <b>2005</b>       |                   |                   |                   |                   |                   | <b>2006</b>       |                   |                   |                   |                   |                   |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|   | <u><b>JUL</b></u> | <u><b>AUG</b></u> | <u><b>SEP</b></u> | <u><b>OCT</b></u> | <u><b>NOV</b></u> | <u><b>DEC</b></u> | <u><b>JAN</b></u> | <u><b>FEB</b></u> | <u><b>MAR</b></u> | <u><b>APR</b></u> | <u><b>MAY</b></u> | <u><b>JUN</b></u> |
| [1] <b>ORIGINAL PROJECTION</b><br><b>(¢/kWh)</b>    | 1.3632            | 1.6132            | 1.3903            | 1.5257            | 1.5223            | 1.4335            | 1.5034            | 1.3208            | 1.3912            | 1.3097            | 1.6232            | 1.5856            |
| [2] <b>ACTUAL EXPERIENCE</b><br><b>(¢/kWh)</b>      | 1.7228            | 1.3570            | 1.3412            | 1.3278            | 1.3732            | 1.3271            | 1.1901            | 0.9779            | 1.5107            | 1.5391            | 1.8262            | 1.7836            |
| [3] <b>AMOUNT IN BASE</b><br><b>(¢/kWh)</b>         | 1.1500            | 1.1500            | 1.1500            | 1.5802            | 1.5802            | 1.5802            | 1.5802            | 1.5802            | 1.5802            | 1.5802            | 1.5802            | 1.5802            |
| [4] <b>VARIANCE FROM ACTUAL</b><br><b>[1-2]/[2]</b> | -20.87%           | 18.88%            | 3.66%             | 14.90%            | 10.86%            | 8.02%             | 26.33%            | 35.06%            | -7.91%            | -14.90%           | -11.12%           | -11.10%           |

**South Carolina  
Office of Regulatory Staff  
History of Cumulative Recovery Account Report  
for Duke Energy Carolinas**

**EXHIBIT MAJ-7**

| <b><u>PERIOD ENDING</u></b>                    | <b><u>OVER (UNDER)\$</u></b> |
|--|------------------------------|
| May 1979 - Automatic Fuel Adjustment in Effect |                              |
| November-79                                    | 1,398,442                    |
| May-80   | 11,322,948                   |
| November-80                                    | 4,588,331                    |
| May-81   | (5,760,983)                  |
| November-81                                    | (13,061,000)                 |
| May-82   | (14,533,577)                 |
| November-82                                    | (4,314,612)                  |
| May-83   | 20,915,390                   |
| November-83                                    | 14,192,297                   |
| May-84   | 18,245,503                   |
| November-84                                    | 14,478,363                   |
| May-85   | 2,551,115                    |
| November-85                                    | (553,465)                    |
| May-86   | (1,318,767)                  |
| November-86                                    | (29,609,992)                 |
| May-87   | (27,241,846)                 |
| November-87                                    | (29,329,168)                 |
| May-88   | (9,373,768)                  |
| November-88                                    | 6,544,914                    |
| May-89   | 6,067,739                    |
| November-89                                    | 11,372,399                   |
| May-90   | 15,421,968                   |
| November-90                                    | 2,939,303                    |
| May-91   | 17,068,483                   |
| November-91                                    | 21,265,000                   |
| May-92   | 21,080,856                   |
| November-92                                    | 11,553,801                   |
| May-93   | 16,959,555                   |
| November-93                                    | 221,606                      |
| May-94   | 6,609,897                    |
| November-94                                    | 1,037,659                    |
| May-95   | 5,088,619                    |
| November-95                                    | (377,507)                    |
| March-97                                       | (13,299,613)                 |
| March-98                                       | (1,956,794)                  |
| March-99                                       | 13,044,443                   |
| March-00                                       | 26,703,441                   |
| March-01                                       | 20,367,528                   |
| March-02                                       | (7,446,417)                  |
| March-03                                       | (1,121,094)                  |
| March-04                                       | 11,424,295                   |
| June-05  | (2,669,646)                  |
| June-06  | 6,984,672                    |

**EIA Average Weekly Coal Commodity Spot Prices  
Business Week Ended June 23, 2006**



**Key to Coal Commodities by Region<sup>1</sup>**

Central Appalachia: Big Sandy/Kanawha 12,500 Btu, 1.2 lb SO<sub>2</sub>/mmBtu  
Northern Appalachia: Pittsburgh Seam 13,000 Btu, <3.0 lb SO<sub>2</sub>/mmBtu  
Illinois Basin: 11,800 Btu, 5.0 lb SO<sub>2</sub>/mmBtu

Powder River Basin: 8,800 Btu, 0.8 lb SO<sub>2</sub>/mmBtu  
Uinta Basin in Colo.: 11,700 Btu, 0.8 lb SO<sub>2</sub>/mmBtu